

FACTS AND FIGURES ABOUT HONG KONG'S FAILED WASTE MANAGEMENT STRATEGY

The numbers just don't add up.....

In its Hong Kong Blueprint for Sustainable Use of Resources 2013-2022 (the "Blueprint"), published in (month) 2013, the Environmental Protection Department ("EPD") provided the following data on Municipal Solid Waste ("MSW"):

1. In Hong Kong, 8,979 tonnes of MSW is sent to landfill every day, or 1.27 Kg per person given a population of 7.07 million (page 2 of the Blueprint).
2. HK's current level of gross waste generation amounts to 1.36 Kg per day per person, or 9,656 tonnes per day with the same (Page 5 of the Blueprint).
3. HK's MSW recycling rate is 48% of waste generated (Page 10 of the Blueprint).

Since figure 2 is only 7% greater than figure 1, statement 3 is clearly **FALSE**

Stated arithmetically, $(9656-8979)/9656 \times 100 = 7.01\%$

....even using EPD's own methodology we come up with a much lower recycling figure:

In its paper "Matters on Hong Kong's Municipal Solid Waste Recovery Rate and Handling of Imported Waste" presented to this panel on 26 July 2013, EPD revealed that its actual formula for calculating the recycling (or "recovery") rate is:

$$MSW\ recovered / (MSW\ recovered + MSW\ disposed)$$

MSW recovered is stated to derive from (i) net Recyclables exported plus (ii) total of MSW recycled locally.

We assume that (ii) is negligible so we can take it that (i), the total tonnage of recyclables exported (5,846) less the total imported (3,926) i.e. 1,920 tonnes in 2012, is a fair estimate of how much MSW is actually being recycled. So, populating the above formula with the data provided by EPD in the same paper we can see that EPD's own estimate of the true recycling rate should be:

$$1,920 / (1,920 + 8,979) = 17.6\%$$

.....and, as further evidence of the failed recycling effort:

The EPD website link www.wastereduction.gov.hk/en/quickaccess/stat_recycle.htm displays is a bar chart that shows the tonnage of waste thought to have been recycled in HK has DECLINED from a peak of 3,600 tonnes in 2010 to 2,100 tonnes in 2012. We learn additionally

that a mere 3% of this figure derives from local recycling efforts, 97% is exported. On this basis the recycling rate would come out as **18.9%**

So, what is the true rate of recycling in Hong Kong?

Whichever way we look at the figures it is clear that Hong Kong's recycling effort is significantly lower than that claimed by EPD in the Blueprint.

We know from daily observation that the "three coloured recycling bins" are too few in number, too small, inconveniently located, badly designed, not properly managed (since they remain overfull for days on end), and are often misused (because of the lack of clear instructions on what types of paper, plastics and metals should be placed in them).

Therefore, even on the most generous estimate HK cannot possibly be recycling more 20% of MSW generated, and in fact the true figure could well be lower than that.

Conclusion

Since the EPD is suspected of publishing misleading statistics and making false claims about its recycling efforts, the public has lost confidence in its ability to handle HK's waste problem in general. I am certainly dismayed by the EPD's prioritization of environmentally damaging and expensive capital projects as a cover-up for the failures in the threes. A new approach is needed:

1. Raise the true waste recycling rate to over 50% in line with other jurisdictions, cutting the amount of waste needing to be disposed of to 5,500 tonnes per day.
2. Waste reduction at source targeting a 40% decrease in MSW originally generated (from 11,000 to 7,000 tonnes per day) should further reduce waste to be disposed of to a net 3,500 tonnes per day.
3. Construct regional, integrated waste management and recycling facilities near each existing landfill site using advanced technologies and methods for sorting, anaerobic thermal treatment, composting etc. This could eliminate completely the need for damaging mass-burn incineration and major landfill extension.

I urge the Panel to reject the proposed capital projects and demand much better performance from EPD in the areas of waste reduction, recycling and reuse.